VII. Notes on the Genus Hydaticus (Leach), with Descriptions of new Species. By the Rev. Hamlet Clark, M.A., F.L.S., V.-P. Ent. Soc.

[Read 1st August, 1864.]

DURING Dr. Schaum's late visit to England, he was good enough to propose to me that we should combine together to prepare a complete and accurate Catalogue of all the known species of Hydrocantharidæ, with the object of offering our manuscript to the trustees of the British Museum as a second edition of their Catalogue of this interesting group (the first edition, prepared in 1847 by Dr. Schaum and Mr. Adam White, having long since been exhausted): very willingly I accepted his suggestion, and hence have occupied myself in examining the exotic species of the different genera, being not without hope that the Museum authorities would receive such a contribution, especially as Dr. Schaum has, with infinite labour, succeeded in mastering the most difficult portion of the work, the elucidation and determination of the Furopean species, for his forthcoming volume of Erichson's Naturgesch. d. Ins. Deutschl. The following notes are the result of my examination of the species of Hydaticus, a genus which, in coloration of the forms composing it, is the most beautiful of all. I ought to add, that Dr. Gray, some months ago, most liberally placed at my disposal for examination the undescribed species of the genus in the Museum Collection. At that time, however, I was unable to enter upon the subject, and therefore returned the specimens. The following paper, being prepared in the country, does not contain descriptions of those new species referred to in the British Museum Catalogue under manuscript names.

It is worthy of remark, that the most important additions that have been made during the last few years to my collection of this group have been made by non-entomological friends residing abroad, who have kindly interested themselves in sending home, from time to time, the results of their examination of their respective neighbourhoods. Englishmen, like water-beetles, are found in every region of the globe. There are few Entomologists who have not one or more friends living for a time in some foreign

country. If only these could be induced to pay attention to the beautiful forms of insect-life around them, the advantage would be twofold: not only would they find, to their surprise, that such a rational pursuit would beguile many weary hours, and give real interest to a locality which perchance otherwise would be the opposite of interesting, but science itself would be the gainer, for we might thus obtain some knowledge of the life-history of insects of which at present we know nothing, except the external forms. When we are told that upwards of thirty species of *Coleoptera* have been found in the court of the British Museum itself, in the very heart of London, we may be sure that there is no spot on the earth, however apparently uninviting, that will not amply repay investigation.

1. H. Bakewellii, n. sp. (Pl. XIV. fig. 1.)

Ovalis, depressus, niger, flavo-maculatus: capite flavo, ad apicem vel nigro-bimaculato, vel omnino nigro; thorace nigro, lateribus vittâque transversali in medio interruptâ flavis; clytris ovalibus, pone medium depressis, subtilissimè punctatis, punctorum etiam seriebus duabus obscuris (hâc juxta medium penitus obsoletâ), nigris, maculis utrinque 4 flavis magnis, 1^{ma} ad scutellum subcirculari, 2^{nda} apud humeros juxta marginem longitudinaliter inæquali, 3^a fascia lata pone medium (haud suturam attinente) transversim dispositâ, 4^{ta} subcirculari juxta apicem, haud suturam sed marginem approximante, apice quoque subtiliter flavo-maculato; antennis flavis: corpore subtus nigro; pcdibus rufo-flavis, femoribus posticis fuscis.

Long. corp. lin. 7; lat. lin. 4.

The species may be recognized by its tolerably even post-medial oroad transverse bar of flavous, which, in form, is unlike that of any other species of the genus. I have received several examples at different times, which present only two forms of pattern; the typical one, of which the above is the diagnosis, and a darker pattern, in which all the maculæ are considerably reduced in size, and the transverse bar of the elytra commuted into two transversely-arranged spots. The transverse flavous bar of the thorax is also, in this latter pattern, obliterated.

This handsome species appears to be not uncommon in the neighbourhood of Moreton Bay, whence I have received it from my valued correspondent, Mr. Diggles. I name it after my friend R. Bakewell, Esq., who kindly supplied the first example to my

collection, and to whose courteous liberality I am much indebted for assistance in my entomological researches.

In the cabinets also of the British Museum, and R. Bakewell, Esq.

2. H. bihamatus (Esch. Dej. Cat.); Anbé (Spec. Gen. 174).

This species is the same as II. Goryi, Aubé (Spec. Gen. 175), and also is identical with II. scriptus of Blanchard in Homb. et Jacq.;* the insect has a very extended range, being found in the Philippine Islands (whence I have received it from Mr. Thorey), in Aru (taken by Mr. Wallace), New Holland, Moreton Bay (received at different times by Mr. Stevens), Amboina, in New Guinea, Batchian and Ceylon. I have also a fine series of the insect taken by the late lamented M. Mouhot, in Cambodia, in which the flavous markings are almost entirely absent.

3. H. Adamsii, n. sp.

Latè ovatus, satis rotundatus, medio dilatatus, fusco-cinercus, flavo-irroratus: capite flavo, ad basin transversè nigro, etiamque apud medium macula angulata litteram V formanti; thorace flavo, antice tenuiter et ad basin latius nigro-marginato; scutello nigro; elytris latis, nigris, levibus, nitidis; undique punctorum tres series apparent, puncta ipsa rara, haud profunda, aliquando (et præsertim serie 3ª ad marginem) obsoleta; elytra multitudine macularum minutarum irrorata sunt; maculæ confertæ, flavæ, juxta latera et basin confluentes; margines ipsi flavi, sutura tenuiter nigra apparet: corpore subtus nigro; pedibus rufo- vel fusco-flavis, tarsis tibiisque posticis nigris; antennis rufis.

Long. corp. lin. $6\frac{1}{2}$; lat. lin. 4.

A species which at first sight reminds us of the European species H. bilineatus, De Geer; but while in general pattern it exactly resembles this species, it is entirely distinct: in size it is much shorter ($6\frac{1}{2}$ lin. instead of $7\frac{1}{4}$ lin.), the head is less produced, the apical margination is narrower and the basal broader, and the underside is black instead of rufo-flavous.

I received this form with other interesting species from Mr. Adams, who took two specimens of it on the coast of China. I

^{*} I believe that *H. pacificus* also of M. Aubé (Spec. Gen. 177) will ultimately prove to be but a variety of it. I have in my cabinet one or two examples of *H. bihamatus*, which almost accurately agree with his description of *H. pacificus*.

with many others have to thank Mr. Adams for much precious information respecting species of eastern Coleoptera.

4. H. quadrivittatus, Blanchard (Voy. au Pôl. Sud. p. 48, pl. iv. fig. 3).

I have examined carefully all the reputed examples of this insect in the British Museum, as well as in the cabinet of Mr. Bakewell and my own, and confess that I am unable to discover, either by examples within my reach or by Blanchard's description, any material difference between this form and the widely dispersed and somewhat variable H. vittatus of Fabricius; the two are identical in size and shape and degree of punctuation; the only difference seems to me to consist in the character of the longitudinal marking, which in H. vittatus is expressed by one broad marginal band, more or less longitudinally interrupted from the shoulder, and in H. 4-vittatus by two marginal bands with some little interval between them: how nearly the two approach each other it does not require the aid of a long series of examples to discover; in 4-vittatus the bands are parallel to each other, the outer one being considerably abbreviated; in vittatus the two bands are medially confluent. Whether, however, the two forms may ultimately prove to be distinct or not, the retention of the two names may be desirable; the former representing a modification of the external marginal band which only obtains in Australasia. Blanchard gives as the nearest affinity to his insect H. Hybueri of Europe, with which it has very little indeed in common.

5. H. aruspex, n. sp.

Oblongo-ovalis, parallelus, punctato-striatus, subnitidus, niger: capite flavo, ad basin latè nigro (inter oculos, apnd vittæ nigræ marginem, flavo-bimaculato); thorace lateribus rotundatis, marginem juxta undique impresso, et anticè transversè (sed obsoletè et tenuiter) depresso, et punctato; quoad colorem flavo, ad basin latè et transversè nigro (vitta nigra ad medium lata, latera versus tenuior, haud margines attinet); scutello transverso-triangulari, nitido, nigro; elytris parallelis, crebre subtilissimè punctatis, etiamque seriebus 3 punctorum (quorum externa penitus obsoleta est) ornatis, colore nigris, marginibus undique latè et æqualiter a humeris penitus ad apicem flavis; corpore subtus nigro-fusco; pedibus rufis; antennis rufo-flavis.

Long. corp. lin. $6\frac{1}{4}$; lat. lin. $3\frac{3}{4}$.

Parallel in form, like ruficollis, Fab., though much narrower than that insect: the species before us is remarkable also by its broadly flavous or testaceous thorax combined with the uniform blackness of the elytra, relieved only by the broad and evenly-disposed flavous margination, which extends from the humeral angles nearly to the apex.

I obtained a single example some years ago in the Gory Col-

lection, from China.

6. H. verecundus, n. sp.

Ovalis, parallelus, punctato-striatus, nitidus, niger, flavo-notatus: capite flavo, ad basin transversè nigro, inter oculos maculæ duæ flavæ triangulares, sese attingentes, apparent; thorace brevi, lateribus rotundatis, anticè transversè tenuiter depresso, flavo, marginibus antico posticoque late nigris (margo anterior, latitudine æqualis, haud latera attinet; margo basalis, ad medium anteriore latior, sensim angustior fit, et tennis latera pertingit); scutello triangulari, nigro; elytris sat parellelis (pone medium sublatioribus), apice rotundato, haud attenuato; punctorum tres series undique apparent, puncta distantia, minime profunda, attamen perspicua et in seriebus 2nda et 3ia minus obsoleta; quoad colorem elytra nigra apparent; vitta basalis a scutello ad humeros extendit, haud basin attingens, tenuis, æqualis, recta (aut sub-circularis et ad marginem medium leviter sese flectens), ad vittæ terminum margo usque ad humerum latè flaveseit; pone medium inter seriem punctorum 3am et marginem macula flava apparet, subquadrata aut aliquando in duas divisa; ad anicem quoque altera, major, figura et statura incerta (nunc macula insularis ad ipsum marginem, nune vitta transversalis, inæqualis, communis, lata, et ad apicem ipsum pertingens): corpore subtus nigro-fusco; antennis flavis; pedibus flavis, posticis fuscis et flavo-annulatis.

Long. eorp. lin. 4; lat. lin. $2\frac{1}{3}$.

One of the smallest species of the genus; and to be also recognised by its more than usually distinct punctuation, as well as by the pale regular transverse band on its black elytra. It is nearly allied to a species in my collection, "basalis, Dej.," from North America, but much smaller. I am sorry to say that the two examples in my possession forbid me to register the habitat of this insect with certainty: one of them is labelled South America, the other (from the Gelin Collection) Java.

7. H. Bowringii, n. sp. (Pl. XIV. fig. 3.)

Ovalis, convexus, hand parallelus, latus, sat rotundatus, punctatus, niger, flavo-maculatus: capite inter oculos supernè undique impresso, flavo, basi latè transversè nigro; thorace subtilissimè punctato, anticè punctis etiam majoribus sparso, flavo, margine basali nigro, ad medium latiori, margine frontali etiam nigro sed attenuatiori, et plerumque haud latera attingenti; elytris latis, sat rotundatis, subtilissimè punctatis, punctis etiam seriebus duabus ordinatis majoribus (serie externâ aliquando obsoletâ), nigris, vittis undique duabus maculâque flavis—vittarum hâc mediâ, inter strias 1am et 2dam, lineari, cum suturâ subparallelâ, et marginem juxta apicem penitus attinenti, illâ marginali sed haud marginem attingenti, a humeris usque ad apicem productâ-maculâ apud scutellum undique circulari insulari, inter suturam et striam 1am: corpore subtus rufo-fusco; pedibus rufo-flavis, femoribus posticis rufo-fuscis; antennis rufo-fuscis, articulorum basibus flavis.

Long. corp. lin. $7\frac{1}{2}-7$; lat. lin. $4\frac{1}{2}-4\frac{1}{4}$.

I received a single example of this species from the Gory Collection some years ago, taken in New Holland; more recently it has been taken by Mr. Diggles at Moreton Bay; and also on the coast of China by Mr. Adams, to whose great kindness I am indebted for a fine series. It was taken also by Mr. Bowring, to whom I dedicate the species.

In the cabinets of the British Museum, Dr. Schaum and the Rev. H. Clark.

8. H. decorus, Klug (Symbolæ Physicæ, tab. xxxiii. fig. 5). (Pl. XIV. fig. 4.)

The figure of this species had already been engraved for me by Mr. Robinson, when Dr. Schaum informed me of an admirable figure that already existed of it in Klug's magnificent folio; the species, however, well deserves a repetition of figure, not only on account of the costliness of Klug's work, but also of the extreme apparent rarity of the insect, as well as its beauty of coloration.

The species is taken in Arabia.

9. H. Ussherii, n. sp. (Pl. XIV. fig. 2.)

Ovalis, postice depressus, obscure undique bi-punctato-striatus, niger vel rufo-niger, maculis quibusdam flavis: capite flavo, ad basin latè et transversè fusco; thorace flavo, ad medium

(et præsertim apud basin) fusco-adumbrato, basi ipsa usque ad margines tenuiter fusco-nigra; elytris subparallelis, subtiliter undique puncta in striis duabus ordinata disponuntur; hæ striæ interdum penitus obsoletæ sunt; ad suturam etiam rare puncta minuta serie ordinata apparent; elytra nigra vel fusco-nigra, margo autem usque ad apicem ipsum rufo-flavus, vitta ctiam transversa flava ad basin (hæc, formâ æquali, tenuis nec suturam nec marginem attinct); tres aliæ maculæ undique apparent (nec formâ distinctæ nec omnino flavæ sed nigro-maculatæ aut irroratæ), 1ma apud marginem ante medium, hand vittam mediam attinet, nigro-mixta, sed ad marginem omnino flava, 2da pone medium vitta arcuata haud suturam attingit, figura inæqualis, nigro-maculata, 3ª ad apicem plaga etiam flava hand suturam attinet; antennis flavis: corpore subtus rufo-fusco; pedibus rufo-flavis, femoribus posticis fuscis.

Long. corp. lin. 7; lat. lin. 41/3.

A very distinct and well-marked species, and quite unknown to Dr. Schaum (to whom I sent a specimen for examination), as well as to myself, until it was received by me from my friend Mr. Ussher from Cape Coast Castle in 1863; Mr. Ussher reported that after many months of severe drought, during which time everything had been dried up, the early rains left a small puddle of dirty fresh water, not much bigger than an ordinary hat; one-third water, two-thirds mud and slime. This single little hole was absolutely alive with water-beetles: upwards of 300 specimens were taken from it by Mr. Ussher, chiefly of one or two common species; but among them this, with three or four other novelties. I dedicate it to its captor, in recognition of his ardent love of Entomology, and of his hearty efforts to aid his brother naturalists by enriching their collections with African species.

In the cabinets of Dr. Schaum and the Rev. H. Clark.

10. H. paganus, n. sp.

Oblongo-ovalis, parallelus, punctorum tri-serie ornatus, niger, nitidus: capite lævi, rufo, ad basin transversè nigro; thorace haud ad basin sinuato, anticè excavato, rufo-flavo, ad medium subtiliter fusco-adumbrato, marginibusque antico et postico nigris (hoc ad medium latiori, illo transverso æquali attenuato); elytris parallelis, sat productis, punctorum seriebus 3 (puncta intervallo distantia, haud profunda, et aliquando obsoleta

sunt), quoad colorem nigris, humeris (maculâ parvâ angulatâ) marginibusque irregulariter testaceis vel rufo-flavis: corpore subtus fusco-nigro; pedibus antennisque flavis, illorum femoribus tibiisque posticis fuscis.

Long. corp. lin. $6\frac{1}{2}$; lat. lin. $3\frac{1}{2}$.

Nearly allied to *H. Capicola*, Aubé (Spec. Gen. 196); but differing from it by its more parallel form and entirely rufo-flavous head and thorax; the elytra also, instead of being more or less flavous irrorated with black, are entirely black, the humeral angle being flavous, and also the line of margination, obscurely and interruptedly, but more distinctly flavous near the apex.

I have received a single specimen from the Gold Coast, through

Mr. S. Stevens.

11. H. matruelis, n. sp.

H. sobrino (Aubé) valde affinis, sed elongatior, grandior, et notis distinctior; parallelo-ovalis, flavus, nigro-maculatus et irroratus: capite omnino flavo, margine basali tenuiter nigro; thorace formâ ut in H. sobrino, disco autem toto flavo; basi ad medium transversè et subtiliter nigra; clytris parallelis, lateribus vix rotundatis, subelongatis, punctorum seriebus 2 penitus obsoletis; flavo-testaceis, maculis subtilibus circularibus confertis ornatis; hæ maculæ apud discum medium confluunt, ita ut vitta transversa lata planè apparet (anticè suffusa, ad marginem posteriorem distinctè definita), apicem juxta etiam vitta attenuatior vix conspicua haud margines attinet; margine ipso undique tenuiter flavo: corpore subtus rufo-fusco; pedibus rufo-fuscis; antennis flavis.

Long. corp. lin. 41; lat. lin. 31.

Sufficiently distinct from the Madagascarian *H. sobrinus*. In general form it is decidedly larger, as well as more parallel in outline, and more marked in coloration. The head, instead of being fuscous with divers flavous markings, is entirely flavous, with a black transverse margin (the same as in *H. sobrinus*) at the base. The thorax also is different in pattern; it too is entirely flavous, with a narrow basal margin of black, instead of being medially and broadly transversely black, without any such basal margin. The elytra are comparatively narrower and *more parallel*; and while the manner of coloration is the same in both (that is, a flavous ground irrorated with thickly-aspersed circular black spots, and these spots, by becoming confluent, forming two transverse bars of black, medial and apical), in the species before

us, by reason of the post-medial irroration being less heavy and more sparingly distributed, these transverse bars are more clearly defined and obvious; in *form* they seem to agree the one with the other (the anterior margin is more or less suffused, and hence indistinct, while the posterior is more marked and more sharply defined; this posterior margin is obliquely transverse and wavy in outline, tending somewhat towards the apex as it approaches the suture; the suture also between the transverse bars is narrowly black); the *position*, however, of the medial band differs from that in *H. sobrinus*, being medial rather than post-medial.

I am indebted to my good friend Mr. Ussher, of the Commissariat, for a fine series of this species, which he took at Cape Coast Castle, in West Africa. Upwards of 100 specimens are before me, which present no variety in form or degree of coloration. They all appeared suddenly after rains, in a locality where there had been previously no water at all, and where a short time after all traces of water entirely disappeared.

12. H. Leander, Rossi (Fn. Etrusc. i. 212).

A species found in the south of Europe; and also, as it would seem, throughout the whole of Africa. Lucas reports it as found in Algeria, Aubé in Senegal, Boheman in Caffraria. In 1860 I received a series of a Hydatieus from Mr. Cuming from the White Nile, which I cannot but refer to this species: the question however is not without difficulty, for certainly there is a clearlymarked difference between my White Nile examples and the Caffrarian type which I have received from M. Boheman, as well as the ordinary European form. The examples before me are considerably shorter and relatively broader than the South African, and a trifle shorter as well as much paler than the ordinary European exponents: the basal marking of the thorax, referred to in Aubé's description and present in all other examples that have come before me, is absent in the White Nile specimens. I have not however sufficient evidence before me to warrant the erection of them into a separate species.

13. II. grammicus, Sturm (Germ. Fn. xiii. 1).

I am unable to separate from this well-known European species certain examples of the genus which were taken by Mr. Adams near the coast of China, and by Mr. Wallace in the Eastern Archipelago. The insect would seem hence to have not only a broad but a very unusual range. It is reported by Aubé as also found in Armenia.

14. H. bivittatus, Lap. (Etud. Ent. 97).

A species which, apparently confined to the South African region, is notable among its congeners (unless I am much mistaken) for the aberrations of pattern and variation in size which it presents; its typical character is well described by Aubé (Spec. Gen. 207). I have an example from the Cape, in which a broad and well-defined transverse basal band connects the medial longitudinal marking with the scutellum; and another example from Ovampo Land, Lake N'Gami, resembling in all respects the typical pattern, but strangely aberrant in size, being only $5\frac{3}{4}$ instead of 7 lines in length. The species differs from H. vittatus of Fabricius, and also (if this species be really distinct) from H. 4-vittatus of Blanchard, in the relative position of its two marginal bands, which never approximate (as in the former), and never are abbreviated (as in the latter), but are continued, each parallel to the other, to the apex of the elytra.

15. II. stagnalis, Fab. (Syst. El. i. 265); Aubé (Spec. Gen. 201).

This species would seem to have an extended range. Hitherto it has been known only in Europe, and as a rare species, but I have a single example, identical in all respects with the European form, from the Cape of Good Hope.

16. H. vittatus, Fab., var. (Pl. XIV. fig. 6.)

Dr. Aubé (Spec. Gen. 208) points out the variation of pattern which occasionally is met with in this common eastern insect. I received from Mr. S. Stevens some years ago two examples from North India, which, differing somewhat from each other, and also in some respects in puncturing from the usual type, present (as it seems to me) an additional and remarkable variety of pattern. Of the three rows of striæ-like punctures on the elytra, one only is apparent; and moreover there are certainly sparsely scattered punctures between the suture and the first stria which I cannot discover in any of the usual examples of II. vittatus, and which are not noticed in Aubé's excellent description. The peculiarity however of the variety before us consists in the form of the flavous band; it extends (as will be seen from the figure) from the margin to the region of the scutellum (the scutellum itself and a narrow border line of the elytra being black); it then narrows considerably (its inner boundary line crossing the first row of punctures obliquely), and is continued, parallel to the suture, as far as the apex; the outer boundary line leaves the

line of margination a little behind the shoulder; near the base a narrow longitudinal marking of black extends midway within the flavous band for about one-fifth of the length of the elytra. I agree with my friend Dr. Schaum that the form before us can only be viewed as an interesting and eccentric variety of *H. vittatus*, although in a considerable series of examples of this common species I possess no individuals which offer a connecting link between it and the normal pattern.

17. H. parallelus, n. sp.

Oblongo-subovalis, parallelus, punctato-striatus, rufo-niger, nitidus: capite impunctato, fusco, ad apicem rufo, rufâ etiam maculâ transversali brevi inter oculos (hæc fortasse aliquando maculis duabus contignis divisa est); thorace lateribus rotundatis, anticè profundè excavato, basi subtiliter sinuato; juxta latus anterius fossa transversalis punctis minutis ornatur; ad latera et basin versus rimæ longitudinales velut acuductæ apparent; facies rufa vel rufo-brunnea, maculâ ad medium transversâ nigro-fuscâ adumbrata; scutello triangulari, lævi, nigro; elytris parallelis, subelongatis, seriebus 2 undique punctorum (punctis sparsis et minutis), fusco-rufis, ad latera rufo-irroratis, marginibus ipsis omnino rufis: corpore subtus fusco; antennis flavo-rufis; pedibus flavo-rufis, posticis rufo-fuscis.

Long. corp. lin. $6\frac{1}{2}$; lat. lin. $3\frac{1}{4}$.

I believe that this species is distinct from Hydaticus Capicola of Aubé, though the foregoing diagnosis will show that the two are closely allied; and I am confirmed in this opinion by a note which I made some years ago, that the species before us was almost (probably quite) identical with a MS. species in the British Museum Collection, Fordii* (Brit. Mus. Cat. Hydrocan. p. 18). Now Fordii (ranked, by the by, accidentally in the British Museum Catalogue as a Colymbetes, instead of a Hydaticus) was thus named by Dr. Schaum as a new species when he had also before him H. Capicola, Aubé. I have thus his excellent authority for erecting it into a separate species. The insect before us is more parallel; it is also larger in size, and the elytra are completely fuscous black, the sides only being narrowly sprinkled with rufous; not "elytris rufo-testaceis, crebre nigro-irroratis," as in Aubé's description of his insect.

The range of the habitat of H. parallelus is, however, open to

^{*} Unfortunately, in the Museum this species has been for the time mislaid. I am thus unable to verify my note by a second examination. I have no reason, however, to doubt its accuracy.

somewhat greater difficulty. I have in my collection two examples almost identical in size and colouring, as well as in pattern; of these I received one from Mr. Stevens, from New South Wales, the history of the example being quite undoubted; the other I obtained at the dispersion of the Entomological Society's Collection in 1858, labelled Cape of Good Hope! It would naturally have been supposed that one of these labels must be incorrect. We have clear evidence, however, that H. Capicola, Aubé, originally from the Cape, is found at Moreton Bay (twice I have received examples from that locality); and if Capicola is common to both continents, H. parallelus may be well supposed to be common to both continents also.

18. H. nigro-marmoratus, n. sp.

Oblongo-ovalis, depressiusculus, lævis, rufo-testaceus, nigromaculatus: capite rufo, ad basin transversè et ad interiorem
oculorum marginem nigro; thorace lato, subtilissimè punctulato, anticè excavato (angulis anticis prominulis et acutis),
ad basin sub-sinuato; quoad colorem rufo-testaceo, ad basin
tenuiter nigro; scutello triangulari, lævi, nigro; elytris sat
latis et ad apicem sat acuminatis, undique seriebus punctorum rarorum tribus distinctis ornatis, rufo-testaceis, suturâ
æqualiter et seriebus macularum 3 inæqualibus nigris; hæ
maculæ sinuatæ, longitudinaliter productæ, interruptæ, in
vittis apud punctorum series elytra ornant, et puncta ipsa
plerumque maculis minoribus circularibus cinguntur: corpore
subtus fusco; pedibus flavis, tibiis posticis fuscis; antennis
flavis.

Long. corp. lin. 6; lat. lin. $3\frac{1}{4}$.

A single specimen of this fine African species I received for examination, through the kindness of my friend Mr. John Gray, when at Lisbon, from Dr. Bocage, the head of the National Museum. It was received by him from Angola.

H. nigro-marmoratus will take its place near H. Dregii, which it generally resembles in pattern; it is however abundantly distinct: the sutural line is very evenly black; along the first row of punctures (which are distinct but widely separated) runs an uneven, irregular, longitudinal marking from the base to the apex (in some places broader than but for the most part about equal in breadth to the sutural marking); this is interrupted in front of the middle; the second longitudinal marking is more irregular still, it is placed rather within the second line of punctures, is narrower

than the first, and confluent with it near the base and apex; the punctures themselves (being on the outer side of this marking), and also the punctures of the third row, are each surrounded by a regular and circular marking; the third line of black coloration is between the second and third rows of punctures, and consists of three markings—one near the shoulder, which is confluent with the first at the base, one medial, which is shorter and more minute, and a third post-medial, which is much broader, extending from the second row of punctures to the margination; at the medial margination there is also another fuscous marking.

There is no other species of the genus known to me with which II. nigro-marmoratus can be confounded.

19. H. fulvo-notatus, n. sp.

Ovalis, depressus, nitidus, niger, fulvo-notatus: capite rufo, ad basin laiè et transversè nigro; thorace anticè excavato, ad basin sinuato-rotundato, lateribus vix rotundatis, apicem versus transversè leviter punctato, nigro, lateribus latè flavo-rufis; scutello triangulari, lævi, nigro; elutris latis, subtilissime punctatis, etiamque punctorum seriebus 3 nigris; basi, fascià post-medià, et apice rufo-flavis; basis fascià ornatur nec baseos marginem nec suturam attingenti, latiori ad latera, attenuatiori versus scutellum; fascia post-media interrupta est, latior ad marginem, deinde irregularis et angulata maculâ minori continuitur, maculâ secundâ etiam minori suturam mediam approximat; apicem juxta sed haud attingens, macula latior ad marginem, attenuatior versus (sed neque pertingens) suturam; margo quoque ipse flavus est: corpore subtus fusco; pedibus rufo-fuscis, anticis flavis; antennis flavis.

Long. corp. lin. $5\frac{1}{2}$; lat. lin. $3\frac{1}{2}$.

I received two examples of this pretty species from my friend Mr. Ussher, who took them with other *Hydatici* during the short rainy season at Cape Coast Castle, in Western Africa. The species may easily be recognized by the three transverse fulvous markings on its dark-coloured elytra.

20. H. histrio, n. sp. (Pl. XIV. fig. 5.)

Ovalis, modicè attenuatus, modicè convexiusculus, niger, flavoornatus: capite flavo, ad basin latè et transversè nigro; thorace nigro, ad latera latè flavo; scutello triangulați, nigro; elytris subparallelis, punctorum seriebus duabus undique 222

(punctis confertis, minutis, et inæqualiter dispositis), quoad colorem nigris, apud basin (sed baseos marginem haud omnino attingens) macula subtriangularis ante medium elytrorum inter strias 1^{am} et 2^{dam} sese dirigit, vitta etiam marginalis a humeris propemodum apicem attingit: corpore subtus nigro; pedibus flavis, posticis fuscis; antennis flavis.

Long. corp. lin. 6; lat. lin. 3.

A distinct species from northern India, an example of which I received some years ago in the Gory Collection. It is allied to vittatus, Fab., but besides being of a pattern which it seems almost impossible to place as an extreme variety of that variable species, it is manifestly narrower and more constricted in form.

21. H. nigro-vittatus, n. sp.

Ovalis, convexiusculus, sat latus, et ad latera nonnihil rotundatus: thorace leviter punctato et ad latera apud basin reticulato vel quasi irregulariter acuducto, quoad colorem testaceo-rufo, marginibus ad apicem et basin tenuiter nigris; scutello triangulari, lævi, nigro; elytris undique punctorum seriebus duabus (punctis raris et aliquando obsoletis), omnino subtilissimè et crebrè punctatis, testaceis vel rufotestaceis; vittâ suturali alterâque (vel duabus approximatis) undique nigris; inter vittas et margines elytra quasi nigro-irrorata maculis subtilissimis sparguntur; hæ maculæ autem non confusè aggregatæ, sed plus minus ordinibus dispositæ sunt: corpore subtus, pedibusque rufo-fuscis.

Long. corp. lin. 5; lat. lin. $2\frac{1}{2}$.

Allied to H. Leander of South Europe, and, at first sight, only a variety of that species. The only example that I have seen was received by Mr. Wallace from Japan, and is in my collection.

DESCRIPTION OF PLATE XIV.

Fig. 1. Hydaticus Bakewellii, Clark.
Fig. 2. , Ussherii, Clark.
Fig. 3. , Bowringii, Clark.
Fig. 4. , decorus, Klug.
Fig. 5. , histrio, Clark.
Fig. 6. , vittatus, Fab., var.